

Space Weather Highlights
03 February - 09 February 2014

SWPC PRF 2006
10 February 2014

Solar activity ranged from low to high levels during the summary period. Region 1967 (S12, L=112, class/area=Fkc/1580 on 04 Feb) was the most productive region of the period, producing a total of 36 C-class and six M-class flares, including an M5/1b flare at 04/0400 UTC which was the largest event of the period. Region 1967 was also responsible for an impulsive M3/Sf flare at 04/0123 UTC which was associated with a coronal mass ejection (CME). The CME was first observed in SOHO LASCO C3 coronagraph imagery off the southwestern limb at 04/0142 UTC and subsequently arrived at Earth on 07 Feb at 1703 UTC (see Geomag for impacts). While not as productive, Region 1968 (N09, L=109, class/area=Ekc/740 on 06 Feb) contributed a total of 14 C-class and two M-class flares during its transit across the solar disk. On 09 Feb, a long-duration M1 flare was observed from an unnumbered region behind the eastern limb which has yet to rotate into view. Late in the period, Regions 1974 (S12, L=360, class/area=Esi/220 on 09 Feb), 1975 (S15, L=073, class/area=Dac/080 on 09 Feb), and 1976 (S15, L=320, class/area=Eac/240) all exhibited moderate growth and magnetic complexity, although only 1974 and 1975 produced C-class flares.

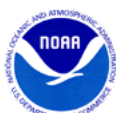
No proton events were observed at geosynchronous orbit.

The greater than 2 MeV electron flux at geosynchronous orbit was at predominately normal levels with moderate levels observed briefly on 09 Feb due to an enhanced solar wind environment from a combination of CME and coronal hole high speed stream (CH HSS) effects.

Geomagnetic field activity was at quiet levels with isolated periods of unsettled activity on 03 - 06 Feb under a nominal solar wind environment. Quiet conditions on 07 Feb gave way to unsettled (1500-2100 UTC) and then active conditions (2100-2400 UTC) as an interplanetary shock from the 04 Feb M3/Sf flare arrived at the ACE spacecraft on 07 Feb at approximately 1616 UTC. Solar wind speed values increased sharply from around 315 km/s to around 450 km/s with a similar signature noted in the temperature and density values. The total magnetic field values increased from 5 nT to 15 nT while the Bz component reached a maximum southward value of -10 nT. A sudden impulse in the Earth's magnetic field (13 nT measured at the Chambon La Foret magnetometer) was observed on 07 Feb at 1703 UTC. CME influences continued into 08 Feb as active conditions were observed from 0000-0900 UTC, followed by a brief period of quiet conditions midday on 08 Feb. Late on 08 Feb, active conditions were observed from 1800-2100 UTC and G1 (Minor) geomagnetic storm conditions were observed from 2100-2400 UTC due to continued CME effects. As CME effects began to subside, isolated periods of active conditions (0000-0300 and 1800-2100 UTC) were observed on an otherwise quiet to unsettled 09 Feb.

Space Weather Outlook
10 February - 08 March 2014

Solar activity is expected to be at low levels with a slight chance for moderate levels for 10 - 20 Feb. Moderate to high levels are expected for 21 Feb - 05 Mar as old Regions 1967 and 1968



once again transit the visible disk. A return to low levels with a slight chance for moderate levels is expected for 06 - 08 Mar as old 1967 and 1968 rotate off the western limb.

No proton events are expected at geosynchronous orbit for the duration of the outlook period.

The greater than 2 MeV electron flux at geosynchronous orbit is expected to be at normal to moderate levels with a chance for high levels on 10 - 14 Feb due to an enhanced solar wind environment from the 07 Feb coronal mass ejection (CME) arrival and negative polarity coronal hole high speed stream (CH HSS) influence. Normal to moderate levels are expected for the remainder of the outlook period.

Geomagnetic field activity is expected to be at predominately quiet levels throughout the outlook period with unsettled levels on 10 - 11 Feb, 17 - 18 Feb, and 25 Feb due to CH HSS effects.



Daily Solar Data

Date	Radio Flux 10.7cm	Sun spot No.	Sunspot Area (10 ⁻⁶ hemi.)	X-ray Background Flux	Flares							
					X-ray			Optical				
					C	M	X	S	1	2	3	4
03 February	188	168	1870	C1.6	12	0	0	18	0	0	0	0
04 February	188	183	1970	C2.5	12	4	0	12	3	0	0	0
05 February	194	234	2080	C1.5	10	1	0	14	0	0	0	0
06 February	191	223	2630	C1.1	8	1	0	8	1	0	0	0
07 February	178	241	2270	C1.2	5	2	0	14	1	1	0	0
08 February	172	186	1770	B9.6	8	0	0	4	0	0	0	0
09 February	169	180	1760	C1.1	4	1	0	6	0	0	0	0

Daily Particle Data

Date	Proton Fluence (protons/cm ² -day-sr)			Electron Fluence (electrons/cm ² -day-sr)		
	>1 MeV	>10 MeV	>100 MeV	>0.6 MeV	>2MeV	>4 MeV
	03 February	4.4e+05	1.0e+04	2.4e+03		2.8e+05
04 February	4.5e+05	1.0e+04	2.2e+03		1.2e+05	
05 February	5.1e+05	1.0e+04	2.5e+03		1.4e+05	
06 February	1.8e+05	1.0e+04	2.4e+03		8.8e+04	
07 February	2.1e+05	1.0e+04	2.5e+03		3.8e+05	
08 February	3.5e+05	9.8e+03	2.3e+03		6.5e+04	
09 February	4.6e+05	1.0e+04	2.5e+03		1.2e+07	

Daily Geomagnetic Data

Date	Middle Latitude Fredericksburg		High Latitude College		Estimated Planetary	
	A	K-indices	A	K-indices	A	K-indices
	03 February	5	1-2-2-1-2-2-1-1	4	0-1-0-1-2-3-0-0	6
04 February	4	1-1-1-0-2-2-1-1	0	0-0-0-0-0-0-0-0	5	2-2-1-1-1-1-1-1
05 February	5	0-2-1-0-3-1-1-2	1	0-0-0-0-1-0-0-1	4	1-1-1-0-2-1-1-2
06 February	5	1-2-1-2-2-2-1-1	14	1-1-1-4-5-4-1-0	9	2-3-2-2-3-2-2-1
07 February	7	0-0-1-2-1-2-2-4	5	0-0-1-3-1-1-2-2	9	1-0-2-2-1-3-3-4
08 February	19	4-4-3-2-3-1-2-5	24	3-3-5-4-5-3-3-2	23	4-4-4-2-2-2-4-5
09 February	11	3-2-3-1-3-2-3-2	25	3-3-5-1-5-5-3-2	18	4-3-3-1-3-3-4-3

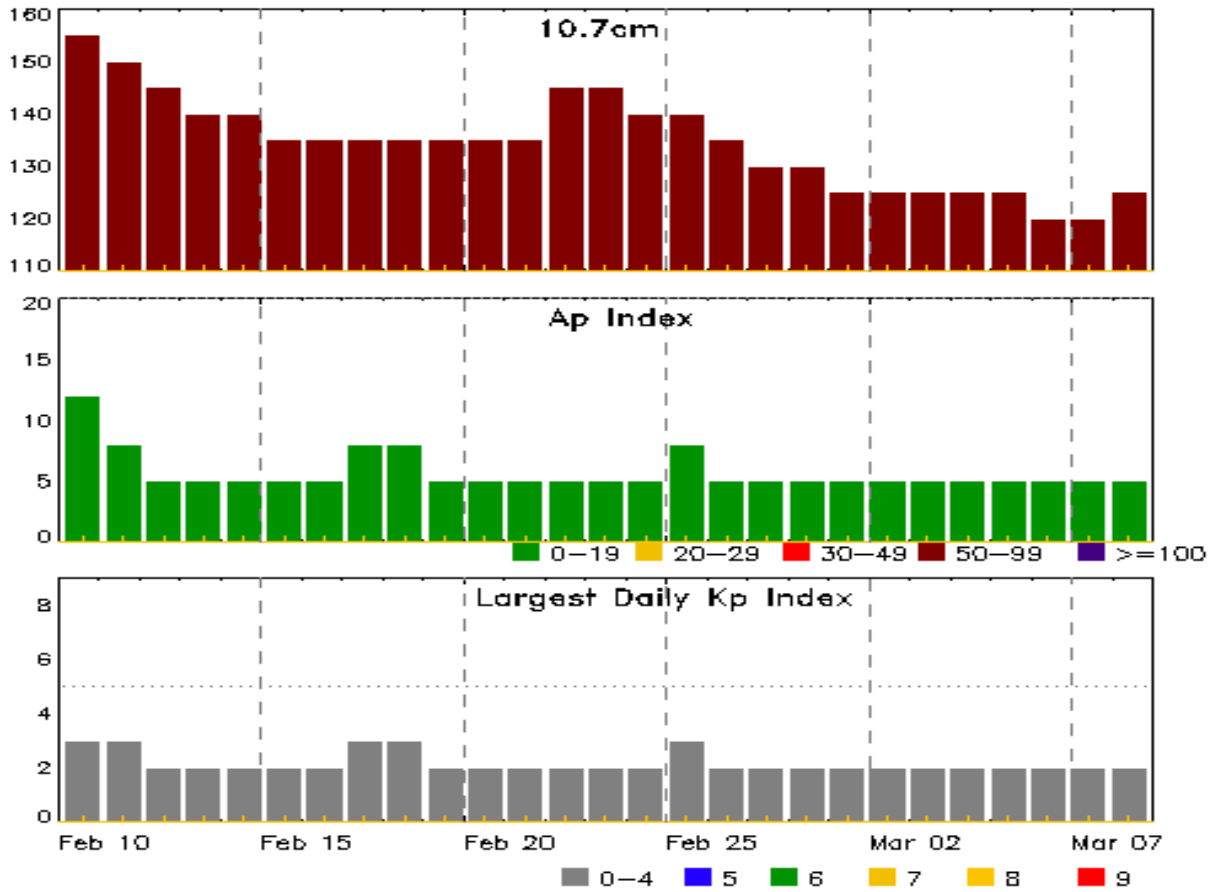


Alerts and Warnings Issued

Date & Time of Issue UTC	Type of Alert or Warning	Date & Time of Event UTC
04 Feb 0401	ALERT: X-ray Flux exceeded M5	04/0359
04 Feb 0414	SUMMARY: X-ray Event exceeded M5	04/0357 - 0406
06 Feb 1845	WATCH: Geomagnetic Storm Category G1 predicted	
07 Feb 1645	WARNING: Geomagnetic Sudden Impulse expected	07/1705 - 1735
07 Feb 1716	SUMMARY: Geomagnetic Sudden Impulse	07/1703
07 Feb 2116	WARNING: Geomagnetic K = 4	07/2115 - 08/1300
07 Feb 2251	ALERT: Geomagnetic K = 4	07/2248
08 Feb 0129	WARNING: Geomagnetic K = 5	08/0130 - 0700
08 Feb 1250	EXTENDED WARNING: Geomagnetic K = 4	07/2115 - 08/2200
08 Feb 2020	EXTENDED WARNING: Geomagnetic K = 4	07/2115 - 09/1300
08 Feb 2331	WARNING: Geomagnetic K = 5	08/2329 - 09/0700
08 Feb 2338	ALERT: Geomagnetic K = 5	08/2335
09 Feb 1235	EXTENDED WARNING: Geomagnetic K = 4	07/2115 - 09/2100
09 Feb 2055	EXTENDED WARNING: Geomagnetic K = 4	07/2115 - 10/1000



Twenty-seven Day Outlook



Date	Radio Flux 10.7cm	Planetary A Index	Largest Kp Index	Date	Radio Flux 10.7cm	Planetary A Index	Largest Kp Index
10 Feb	155	12	3	24 Feb	140	5	2
11	150	8	3	25	140	8	3
12	145	5	2	26	135	5	2
13	140	5	2	27	130	5	2
14	140	5	2	28	130	5	2
15	135	5	2	01 Mar	125	5	2
16	135	5	2	02	125	5	2
17	135	8	3	03	125	5	2
18	135	8	3	04	125	5	2
19	135	5	2	05	125	5	2
20	135	5	2	06	120	5	2
21	135	5	2	07	120	5	2
22	145	5	2	08	125	5	2
23	145	5	2				



Energetic Events

Date	Time			X-ray		Optical Information			Peak		Sweep Freq	
	Begin	Max	Half	Class	Integ Flux	Imp/ Brtns	Location Lat CMD	Rgn #	Radio Flux		Intensity	
			Max						245	2695	II	IV
04 Feb	0116	0123	0131	M3.8	0.025	SF	N09W13	1968				
04 Feb	0357	0400	0406	M5.2	0.018	1B	S14W06	1967				
04 Feb	0938	0949	0958	M1.4	0.013			1967				
04 Feb	1525	1602	1649	M1.5	0.058	1N	S12W12	1967				
05 Feb	1611	1620	1642	M1.3	0.018			1967				
06 Feb	2256	2305	2310	M1.5	0.008			1967		180		
07 Feb	0447	0456	0504	M2.0	0.014	2N	S15W50	1967				
07 Feb	1025	1029	1031	M1.9	0.003	1N	N09W53	1968				
09 Feb	1540	1617	1652	M1.0	0.032							

Flare List

Date	Time			X-ray Class	Imp/ Brtns	Optical Location Lat CMD	Rgn #
	Begin	Max	End				
03 Feb	0015	0015	0017		SF	S10W01	1967
03 Feb	0038	0042	0044	C3.7	SF	N09E07	1968
03 Feb	0041	0042	0048		SF	S11E01	1967
03 Feb	0056	0059	0102	C2.3	SF	S11E01	1967
03 Feb	0140	0142	0148		SF	S11E00	1967
03 Feb	0216	0217	0221		SF	N08E06	1968
03 Feb	0229	0235	0304		SF	S11W01	1967
03 Feb	0325	0347	0347		SF	S11W01	1967
03 Feb	0421	0424	0425		SF	S11W01	1967
03 Feb	0445	0535	0558	C4.9	SF	S11W02	1967
03 Feb	0529	0530	0557		SF	N09E01	1968
03 Feb	0619	0625	0633	C5.7			1967
03 Feb	0812	0830	0903	C9.0			1967
03 Feb	1058	1101	1104	C4.4			1967
03 Feb	1243	1254	1305	C7.9			1967
03 Feb	1321	1334	1344	C6.5			1968
03 Feb	1435	1436	1439		SF	S12W07	1967
03 Feb	1512	1512	1515		SF	S09W57	1969
03 Feb	1540	1544	1548	C4.6			1967
03 Feb	1641	1642	1645		SF	S11W04	1967
03 Feb	1752	1759	1806	C4.5	SF	S15W01	1967
03 Feb	1853	1854	1857		SF	S11W58	1969



Flare List

Date	Time			X-ray Class	Imp/ Brtns	Optical		Rgn #
	Begin	Max	End			Location Lat CMD		
03 Feb	1928	1937	1948	C6.9	SF	S10W12		1967
03 Feb	2229	2233	2236	C7.8				
03 Feb	2313	2331	2346		SF	S12W11		1967
04 Feb	0001	2354	0011		SF	S12W11		1967
04 Feb	0015	0022	0028		SF	N09W09		1968
04 Feb	0026	0125	0355		1B	S11W10		1967
04 Feb	0030	0031	0038		SF	N09W09		1968
04 Feb	0116	0123	0131	M3.8	SF	N09W13		1968
04 Feb	0357	0400	0406	M5.2	1B	S14W06		1967
04 Feb	0545	0549	0554	C3.3	SF	S12W12		1967
04 Feb	0616	0618	0650		SF	N09W11		1968
04 Feb	0714	0924	1013		SF	S12W12		1967
04 Feb	0916	0925	0936	C7.4				1967
04 Feb	0938	0949	0958	M1.4				1967
04 Feb	1153	1220	1224	C5.9				1967
04 Feb	1335	1353	1410	C7.7				1967
04 Feb	1432	1436	1443	C6.4				1967
04 Feb	1455	1530	1712	M1.5	1N	S12W12		1967
04 Feb	1836	1849	1854	C4.7				
04 Feb	1927	1941	1954	C5.4				1967
04 Feb	2013	2020	2027	C4.4				1967
04 Feb	2056	2056	2102		SF	N09W19		1968
04 Feb	2128	2135	2142	C5.5	SF	S15W17		1967
04 Feb	2157	2203	2218	C6.5	SF	N08W21		1968
04 Feb	2237	2247	2255	C7.5	SF	N10W21		1968
04 Feb	2327	2330	2338	C3.8	SF	N10W20		1968
05 Feb	B0001	0001	0022		SF	N09W22		1968
05 Feb	0530	0557	0606	C3.9				1967
05 Feb	0532	0535	0537		SF	S15W21		1967
05 Feb	0552	0555	0607		SF	S15W21		1967
05 Feb	0652	0653	0655		SF	N09W22		1968
05 Feb	0734	0735	0741		SF	N13W24		1968
05 Feb	0743	0750	0803	C3.6	SF	N12W28		1968
05 Feb	0818	0819	0824		SF	N12W29		1968
05 Feb	B0820	U0839	A1018		SF	S13W25		1967
05 Feb	0921	0956	1005	C3.9	SF	N08W30		1968
05 Feb	0953	0955	1005		SF	S12W26		1967
05 Feb	1018	1022	1024	C4.4				1968



Flare List

Date	Time			X-ray Class	Imp/ Brtns	Optical		Rgn #
	Begin	Max	End			Location Lat CMD		
05 Feb	B1200	U1228	A1239		SF	S15W27		1967
05 Feb	B1244	U1256	A1337	C5.2	SF	S14W27		1967
05 Feb	1357	1404	1409		SF	S15W27		1967
05 Feb	1441	1446	1450	C3.3	SF	S14W28		1967
05 Feb	1611	1620	1642	M1.3				1967
05 Feb	1832	1844	1854	C8.6				1967
05 Feb	1928	2002	2026	C4.9				1967
05 Feb	2243	2247	2254	C3.2				
05 Feb	2318	2323	2330	C2.1				
06 Feb	0001	0001	0008		SF	N10W33		1968
06 Feb	0016	0038	0046	C5.4	SF	N10W33		1968
06 Feb	0019	0020	0038		SF	S10W40		1967
06 Feb	0231	0251	0300	C3.4				1967
06 Feb	0402	0436	0501	C7.0	1F	N10W35		1968
06 Feb	0430	0431	0439		SF	S13W19		1972
06 Feb	0757	0801	0803	C1.9				1968
06 Feb	1032	1037	1052		SF	N08W41		1968
06 Feb	1145	1156	1159	C3.0	SF	S16W40		1967
06 Feb	B1227	U1349	A1407		SF	N07W43		1968
06 Feb	1440	1444	1452	C4.0	SF	S13W24		1972
06 Feb	1617	1620	1623	C2.2				1967
06 Feb	2209	2215	2224	C2.1				
06 Feb	2256	2305	2310	M1.5				1967
07 Feb	0013	0019	0027	C4.3	SF	S15W49		1967
07 Feb	0304	0304	0306		SF	S15W50		1967
07 Feb	0330	0455	0549		2N	S15W50		1967
07 Feb	0347	0348	0401		SF	N11W48		1968
07 Feb	0447	0456	0504	M2.0				1967
07 Feb	0614	0622	0629		SF	S15W52		1967
07 Feb	B0645	U0651	0656		SF	S11W56		1967
07 Feb	0711	0715	0737		SF	S18W53		1967
07 Feb	0834	0838	0842	C2.7	SF	N09W52		1968
07 Feb	0855	0900	0906	C2.5	SF	N09W53		1968
07 Feb	1002	1006	1009	C3.1	SF	S18W54		1967
07 Feb	1025	1029	1031	M1.9	1N	N09W53		1968
07 Feb	1042	U1042	A1052		SF	S20W57		1967
07 Feb	B1053	U1053	A1100		SF	N05E45		1973
07 Feb	1441	1452	1456	C3.0	SF	S13W63		1967



Flare List

Date	Time			X-ray Class	Optical		Rgn #
	Begin	Max	End		Imp/ Brtns	Location Lat CMD	
07 Feb	1736	1737	1743		SF	N02E41	1973
07 Feb	2132	2139	2144		SF	S15W17	1967
08 Feb	0028	0036	0051	C2.5	SF	N10W62	1968
08 Feb	0212	0215	0218	C1.7			1967
08 Feb	0639	0644	0652	C1.7			1967
08 Feb	1225	1230	1233	C3.2			1967
08 Feb	1249	1252	1255	C1.5			1967
08 Feb	1752	1756	1802	C2.0			1967
08 Feb	1825	1833	1836	C8.6			1967
08 Feb	2009	2010	2014		SF	S14W34	1975
08 Feb	2023	2023	2032		SF	N04E27	1973
08 Feb	2115	2120	2126		SF	S14W34	1975
08 Feb	2129	2132	2134	C1.9			1976
09 Feb	0300	0324	0333		SF	S10W77	1967
09 Feb	0328	0331	0336		SF	S15W38	1975
09 Feb	0456	0456	0459		SF	S15W39	1975
09 Feb	0512	0517	0522	C2.4	SF	S15W38	1975
09 Feb	0619	0620	0622		SF	S17W37	1975
09 Feb	1151	1207	1223	C2.3			1974
09 Feb	1540	1617	1652	M1.0			
09 Feb	2007	2028	2041	C3.4			1967
09 Feb	2314	2331	2345	C5.2	SF	S15W17	1967



Region Summary

Date	Location		Sunspot Characteristics				Flares								
	Lat CMD	Lon	Helio 10 ⁻⁶ hemi.	Area	Extent (helio)	Spot Class	Spot Count	Mag Class	X-ray			Optical			
									C	M	X	S	1	2	3

Region 1966

25 Jan	S12E27	193	20	2	Cro	3	B										
26 Jan	S12E13	194	10	3	Bxo	5	B										
27 Jan	S12W01	195	plage														
28 Jan	S12W15	196	plage														
29 Jan	S12W29	197	plage														
30 Jan	S12W43	197	plage														
31 Jan	S12W57	198	plage														
01 Feb	S12W71	199	plage														
02 Feb	S12W85	200	plage														
								0	0	0	0	0	0	0	0	0	0

Crossed West Limb.

Absolute heliographic longitude: 195

Region 1967

27 Jan	S14E76	117	120	6	Dso	1	B	3	3								
28 Jan	S12E67	113	580	15	Eki	13	BG	5	7		5	2					
29 Jan	S14E55	111	980	18	Fkc	29	BGD	6			5						
30 Jan	S14E41	112	1190	19	Fkc	42	BGD	6	3		4			1			
31 Jan	S14E29	112	1000	18	Fkc	49	BGD	5			2						
01 Feb	S13E16	112	1410	18	Fkc	86	BGD	6	2		7	2					
02 Feb	S13E01	114	1510	18	Fkc	94	BGD	2	5		16	2					
03 Feb	S13W12	114	1490	18	Fkc	88	BGD	9			13						
04 Feb	S12W24	112	1580	18	Fkc	73	BGD	8	3		4	3					
05 Feb	S12W38	113	1500	19	Fkc	82	BGD	5	1		8						
06 Feb	S13W51	112	1570	22	Fkc	51	BGD	3	1		2						
07 Feb	S13W64	112	1260	22	Fkc	52	BGD	3	1		9			1			
08 Feb	S13W77	113	830	17	Fkc	19	BGD	6									
09 Feb	S13W89	112	630	13	Ekc	9	BGD	2			2						
								70	26	0	77	9	2	0	0		

Still on Disk.

Absolute heliographic longitude: 114



Region Summary - continued

Date	Location		Sunspot Characteristics				Flares											
	Lat CMD	Helio Lon	Area 10 ⁶ hemi.	Extent (helio)	Spot Class	Spot Count	Mag Class	X-ray			Optical							
								C	M	X	S	1	2	3	4			
Region 1968																		
27 Jan	N10E75	119	60	2	Dso	1	B	2										
28 Jan	N10E65	115	100	12	Eao	5	B	1				1						
29 Jan	N09E54	112	210	11	Eao	11	B	1				1						
30 Jan	N09E41	112	160	11	Eao	12	BG					1						
31 Jan	N10E29	112	210	11	Eai	18	BG		1									
01 Feb	N10E15	113	220	12	Eai	28	BG	1										
02 Feb	N10E03	112	300	13	Ekc	35	BG	8	2		15	1						
03 Feb	N10W09	110	320	14	Ekc	33	BG	2			3							
04 Feb	N09W22	110	330	15	Ekc	49	BG	3	1		8							
05 Feb	N09W36	111	430	13	Ekc	49	BG	3			6							
06 Feb	N09W48	109	740	11	Ekc	57	BG	3			4	1						
07 Feb	N13W59	107	620	11	Ekc	56	BG	2	1		3	1						
08 Feb	N11W72	108	450	12	Ekc	34	BG	1			1							
09 Feb	N11W85	108	390	12	Ekc	16	BG											
								27	5	0	43	3	0	0	0	0		

Still on Disk.

Absolute heliographic longitude: 112

Region 1969

01 Feb	S10W35	163	10	3	Bxo	3	B											
02 Feb	S10W49	164	plage															
03 Feb	S11W59	161	30	4	Dro	3	B				2							
04 Feb	S11W73	161	30	4	Dro	4	B											
05 Feb	S10W87	162	10	6	Bxo	2	B											
								0	0	0	2	0	0	0	0	0		

Crossed West Limb.

Absolute heliographic longitude: 163



Region Summary - continued

Date	Location		Sunspot Characteristics				Flares									
	Lat	CMD	Helio	Area	Extent	Spot	Spot	Mag	X-ray			Optical				
			Lon	10 ⁻⁶ hemi.	(helio)	Class	Count	Class	C	M	X	S	1	2	3	4
Region 1970																
02 Feb	S18E54		61	80	4	Dao	4	B					1			
03 Feb	S20E40		60	30	4	Dro	4	B								
04 Feb	S18E26		61	20	3	Cro	4	B								
05 Feb	S18E12		63	20	4	Cro	6	B								
06 Feb	S17W02		63	10	2	Axx	4	A								
07 Feb	S17W16		64	10	1	Axx	1	A								
08 Feb	S17W30		66	plage												
09 Feb	S17W44		67	plage												
									0	0	0	1	0	0	0	0

Still on Disk.

Absolute heliographic longitude: 63

Region 1971																
04 Feb	S11E59		29	10	4	Bxo	3	B								
05 Feb	S12E43		32	50	6	Cso	11	B								
06 Feb	S12E26		35	100	5	Dso	20	B								
07 Feb	S12E12		36	80	8	Dso	19	B								
08 Feb	S12W00		36	70	8	Dao	12	B								
09 Feb	S12W15		38	70	9	Cao	12	B								
									0	0	0	0	0	0	0	0

Still on Disk.

Absolute heliographic longitude: 36

Region 1972																
05 Feb	S13W10		85	0	1	Axx	1	A								
06 Feb	S12W31		88	10	2	Bxo	2	B	1			2				
07 Feb	S12W40		88	30	6	Cso	6	B								
08 Feb	S12W53		89	plage												
09 Feb	S12W67		90	plage												
									1	0	0	2	0	0	0	0

Still on Disk.

Absolute heliographic longitude: 85



Region Summary - continued

Date	Location		Sunspot Characteristics				Flares									
	Lat	CMD	Helio	Area	Extent	Spot	Spot	Mag	X-ray			Optical				
			Lon	10 ⁻⁶ hemi.	(helio)	Class	Count	Class	C	M	X	S	1	2	3	4
Region 1973																
05 Feb	N06E63		12	30	2	Cro	2	B								
06 Feb	N06E51		10	30	4	Cro	6	B								
07 Feb	N05E37		11	60	8	Dso	11	B				2				
08 Feb	N05E24		12	100	6	Dso	9	B				1				
09 Feb	N06E10		13	130	8	Dso	13	B								
									0	0	0	3	0	0	0	0

Still on Disk.

Absolute heliographic longitude: 13

Region 1974																
05 Feb	S11E76		359	40	5	Hsx	1	A								
06 Feb	S12E62		358	170	8	Dso	13	B								
07 Feb	S13E51		357	210	15	Esc	26	BG								
08 Feb	S13E37		359	200	12	Esi	33	BG								
09 Feb	S12E23		360	220	15	Esi	34	BG	1							
									1	0	0	0	0	0	0	0

Still on Disk.

Absolute heliographic longitude: 360

Region 1975																
08 Feb	S15W37		73	40	5	Cso	6	B				2				
09 Feb	S15W50		73	80	9	Dac	17	BG	1			4				
									1	0	0	6	0	0	0	0

Still on Disk.

Absolute heliographic longitude: 73

Region 1976																
08 Feb	S15E78		318	80	8	Dao	3	B	1							
09 Feb	S15E63		320	240	13	Eac	9	BG								
									1	0	0	0	0	0	0	0

Still on Disk.

Absolute heliographic longitude: 320

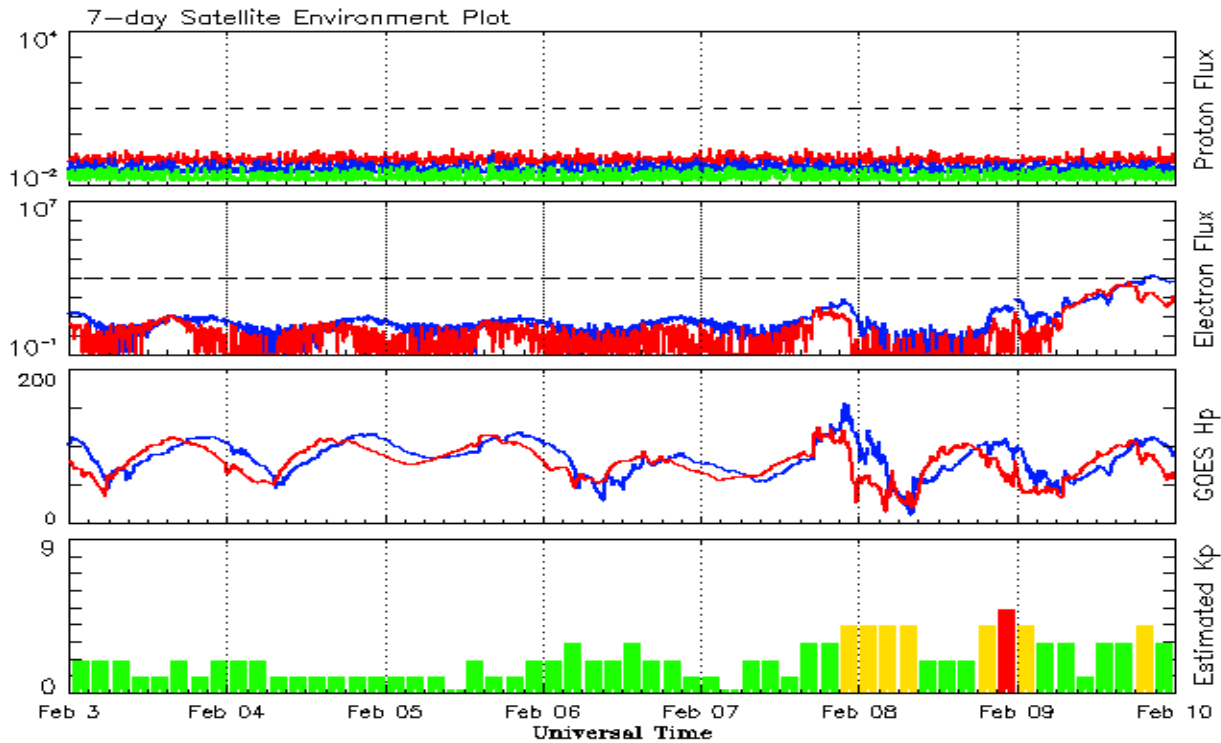


Recent Solar Indices (preliminary)
Observed monthly mean values

Month	Sunspot Numbers					Radio Flux		Geomagnetic	
	Observed values		Ratio	Smooth values		Penticton	Smooth	Planetary	Smooth
	SEC	RI	RI/SEC	SEC	RI	10.7 cm	Value	Ap	Value
2012									
February	50.1	32.9	0.66	94.2	66.9	106.7	126.7	7	8.4
March	77.9	64.3	0.82	94.1	66.8	115.1	126.8	14	8.1
April	84.4	55.2	0.65	91.3	64.6	113.1	125.8	9	8.0
May	99.5	69.0	0.69	87.7	61.7	121.5	123.8	8	8.2
June	88.6	64.5	0.73	83.9	58.9	120.5	121.1	10	8.3
July	99.6	66.5	0.67	82.4	57.8	135.6	119.5	13	8.3
August	85.8	63.0	0.74	83.1	58.2	115.7	119.2	7	8.1
September	84.0	61.4	0.73	83.7	58.1	123.2	118.9	8	7.8
October	73.5	53.3	0.73	85.0	58.6	123.3	119.2	9	7.4
November	89.2	61.8	0.69	87.3	59.7	120.9	120.1	6	7.3
December	60.4	40.8	0.68	88.0	59.6	108.4	120.1	3	7.5
2013									
January	99.8	62.9	0.63	87.1	58.7	127.1	118.9	4	7.5
February	60.0	38.1	0.63	86.7	58.4	104.4	118.0	5	7.4
March	81.0	57.9	0.71	85.7	57.6	111.2	117.1	9	7.4
April	112.8	72.4	0.64	86.7	57.9	125.0	116.6	5	7.2
May	125.5	78.7	0.63	90.5	59.9	131.3	118.1	10	7.0
June	80.1	52.5	0.66	94.4	62.6	110.2	120.9	13	7.1
July	86.1	57.0	0.66	97.9	65.5	115.6	123.9	9	7.3
August	90.2	66.0	0.73			114.7		9	
September	55.0	37.0	0.67			102.7		5	
October	127.1	85.6	0.67			132.3		7	
November	125.7	77.6	0.62			148.4		5	
December	118.2	90.3	0.76			147.7		5	
2014									
January	125.9	82.0	0.65			158.6		6	

Note: Values are final except for the most recent 6 months which are considered preliminary.
Cycle 24 started in Dec 2008 with an RI=1.7.





*Weekly Geosynchronous Satellite Environment Summary
Week Beginning 03 February 2014*

The proton flux plot contains the five-minute averaged integral proton flux (protons/cm²-sec -sr) as measured by the SWPC Primary GOES satellite, near West 75, for each of three energy thresholds: greater than 10, 50, and 100 MeV.

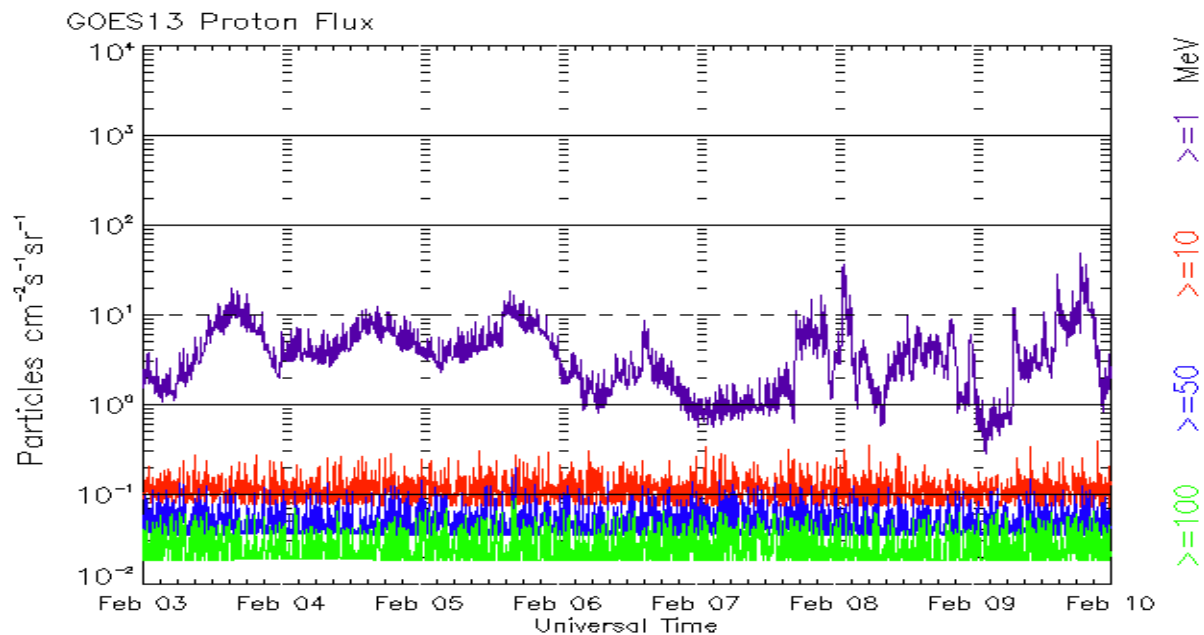
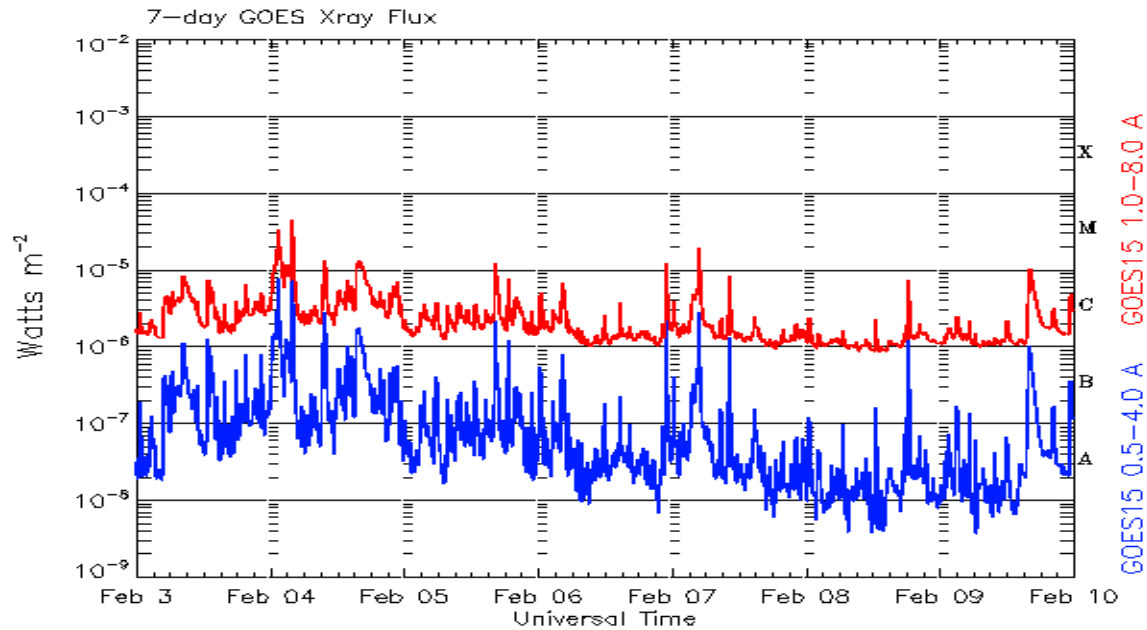
The electron flux plot contains the five-minute averaged integral electron flux (electrons/cm²-sec -sr) with energies greater than 2 MeV by the SWPC Primary GOES satellite.

The Hp plot contains the five minute averaged Hp magnetic field component in nanoteslas (nT) as by the SWPC Primary GOES satellite. The Hp component is parallel to the spin axis of the satellite, which is nearly parallel to the Earth's rotation axis.

The Estimated 3-hour Planetary Kp-index is derived at the NOAA Space Weather Prediction Center using data from the following ground-based magnetometers: Boulder, Colorado; Chambon la Foret, France; Fredericksburg, Virginia; Fresno, California; Hartland, UK; Newport, Washington; Sitka, Alaska. These data are made available thanks to the cooperative efforts between SWPC and data providers around the world, which currently includes the U.S. Geological Survey, the British Geological Survey, and the Institut de Physique du Globe de Paris.

The data included here are those now available in real time at the SWPC and are incomplete in that they do not include the full set of parameters and energy ranges known to cause satellite operating anomalies. The proton and electron fluxes and Kp are 'global' parameters that are applicable to a first order approximation over large areas. H parallel is subject to more localized phenomena and the measurements generally are applicable to within a few degrees of longitude of the measuring satellite.





Weekly GOES Satellite X-ray and Proton Plots
Week Beginning 03 February 2014

The x-ray plots contains five-minute averages x-ray flux ($Watt/m^2$) as measure by the SWPC primary GOES X-ray satellite, usually at West 105 longitude, in two wavelength bands, 0.05 - 0.4 and 0.1 - 0.8 nm. The letters A, B, C, M and X refer to x-ray event levels for the 0.1 - 0.8 nm band.

The proton plot contains the five-minute averaged intergral flux units (pfu = protons/ cm^2 -sec -sr) as measured by the primary SWPC GOES Proton satellite for each of the energy thresholds: >1 , >10 , >30 , and >100 MeV. The P10 event threshold is 10 pfu at greater than 10 MeV.



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Notice: The 27-day Outlook, Satellite Environment, X-ray and Proton plots have been redesigned. Comments and suggestions are welcome SWPC.Webmaster@noaa.gov

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